



GRID SCALE FACTOR 0.999982257
GRID DIST. DIVIDED BY GRID SCALE FACTOR = GROUND DIST.

N 287.000

N 287.000

N 286.000

N 286.000

LEGEND

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM, (1985). LOW WATER DATUM FOR THE ROUGE RIVER IS 571.2 FT. ABOVE MEAN SEA LEVEL.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES. STATE OF MICHIGAN, SOUTH ZONE, (2113). LAMBERT PROJECTION, 1985 NORTH AMERICAN DATUM.

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS

PROJECT DEPTHS ARE AS INDICATED ABOVE.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY FRED LEECH, PARTY CHIEF, ABOARD THE USACOE SURVEY LAUNCH 3045.

AUTOMATED EQUIPMENT USED

POSITIONING:
DATA PROCESSOR:
SOFTWARE:
PLOTTER:
SONIC SOUNDER:

STARLINK DGPS
PANASONIC TOUGHBOOK/MICRON PC
COASTAL OCEANOGRAPHICS HYPACK MAX
ENCAD- CADJET 2
INNERSPACE 448

HORIZONTAL CONTROL

STATION	COORDINATES	
	EAST	NORTH
SENTZ	13,459,886.99	286,819.05
9-60	13,460,542.12	286,370.43

CHANNEL LINE T. P.

T. P.	COORDINATES	
	EAST	NORTH
10N	13,460,677.87	286,609.51
11N	13,460,572.37	286,621.07
12N	13,460,471.40	286,633.33
TS	13,460,562.34	286,553.11
H	13,458,764.03	287,009.99
I	13,458,721.61	286,814.54
J	13,458,233.51	286,970.61
K	13,457,827.38	287,013.10
L	13,457,609.32	287,104.60
M	13,458,360.01	287,050.94

CENTER LINE T. P.

T. P.	COORDINATES	
	EAST	NORTH
3	13,460,618.96	286,491.99
4	13,457,480.03	287,099.57

NOTES:

GAGES USED WERE RETRIEVED FROM GAGE BOARD SET ON PILING NEAR THE MOUTH OF THE ROUGE RIVER, LOCATED AT AN OLD RAILROAD TRESSLE, AND THE SOUTHEAST SIDE OF THE JEFFERSON AVENUE BRIDGE.

POSITIONS WERE DETERMINED BY G.P.S. REFERENCE BEACON 854, LOCATED AT FORT WAYNE DETROIT, MICHIGAN, FREQUENCY 318 KHZ, 200 MPPS. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 208 KHZ AND THE BEAM ANGLE WAS 3.0 DEGREES.

PROJECT DEPTH 21.0 FT.

21.0 FT. CONTOUR



NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
ROUGE RIVER, MICH. CONDITION SOUNDINGS C.S. 33+00 TO C.S. 62+00 22 APRIL 2004 DETROIT AREA OFFICE			
DRAWN BY		APPROVAL RECOMMENDED	
DESIGNED BY		CHIEF, OPS BRANCH	
CHECKED BY		DATE	
REVIEWED		SCALE 1" = 100'	
SUBMITTED		DRAWING NUMBER	
CHIEF, PROJ./OPS SECT		SHEET 2 OF 7	
APPROVED		BY	
CHIEF, CONST - OPS DIVISION		270404a.mgd	